



International Usersgroup

# IEC 61850 Certificate Level A<sup>1</sup>

No. 30920394-Consulting 09-1748

Issued to:  
GE Energy  
2728 Hopewell Place NE,  
Calgary, AB T1Y 7J7  
Canada

For the product:  
D25 Multifunction IED Gen 4  
B097-1 IEC 61850 Server and GSE Agent  
Version 3.00  
L030-0 IEC 61850 MMS Library Version 5.00  
B107-0 RFC1006 (OSI) Over TCP/IP Data Link  
Version 3.20  
B099-0 SNTP Client DTA Version 1.13

Issued by:



The product has not shown to be non-conforming to:  
**IEC 61850-6, 7-1, 7-2, 7-3, 7-4 and 8-1**  
Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10 with product's protocol, model and technical issue implementation conformance statements: "B097-1CS IEC 61850 Server / GSE Agent Conformance Statement, Version 3.00 Revision 0, Associated Software release: Version 3.00 ", "IEC 61850 Tissues Conformance Statement for B097-1 IEC 61850 Server and GSE Agent Version 3.00 in GE Energy D2x Product Family, based on Green Tissues listed in Conformance Test Procedures for Server Devices with IEC 61850-8-1 interface Revision 1.6b" and product's extra information for testing: "Protocol implementation extra information for testing (PIXIT) of the B097-1 IEC 61850 Server and GSE Agent Version 3.00 in GE Energy D2x Product Family".

The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases as defined in the UCA International Users Group Device Test procedures v2.2):

1 Basic Exchange (21/24)	12a Direct Control (5/13)
2+ Data Set Definition (25/29)	12b SBO Control (7/16)
6 Buffered Reporting (15/20)	12c Enhanced Direct Control (5/13)
9a GOOSE Publish (7/11)	12d Enhanced SBO Control (10/19)
9b GOOSE Subscribe (9/10)	13 Time Synchronization (4/5)
	14 File Transfer (4/7)

This Certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCAsim 61850 version 3.19.00 with test suite 3.19.00 and UniCA 61850 Analyzer 4.18.00. The test is based on the UCA International Users Group Device Test Procedures version 2.2. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30920394-Consulting 09-1747 will prevail.

The test has been carried out on one single specimen of the products as referred above and submitted to KEMA by GE Energy, Canada. The manufacturer's production process has not been assessed. This Certificate does not imply that KEMA has certified or approved any product other than the specimen tested.

Arnhem, 26 August 2009

  
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Test Engineer

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Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5  Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv7, Srv8, SrvN1e, SrvN1f, SrvN2, SrvN3
2+: Data Set Definition	Dset1, Dset2, (Dset3), Dset4, (Dset5), (Dset6), Dset7, Dset8, (Dset9)  DsetN1ae, DsetN1cd, DsetN2, (DsetN3), DsetN4, (DsetN5), DsetN6, (DsetN7), DsetN8, (DsetN9), DsetN10, (DsetN11), DsetN12, DsetN13, (DsetN14), DsetN15	
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12  BrN1, BrN2, BrN3, BrN4, BrN5	Br6, Br10
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop5, Gop6, GopN1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12a: Direct control	CltN3, CltN8, DOs1, DOs3	CtIN11
12b: SBO control	Ctl3, CltN1, CltN2, CltN3, CltN4, SBOs2	CtIN11
12c: Enhanced Direct Control	CltN3, CltN8, DOes2, DOes5	CtIN11
12d: Enhanced SBO control	Ctl3, CltN1, CltN2, CltN3, CltN4, CltN9  SBOes1, SBOes2, SBOes3	CtIN11
13: Time sync	Tm1, Tm2, TmN1	TmN2
14: File transfer	Ft1, Ft2ab, FtN1ab, (Ft4)	

Note: (Dset3), (Dset5), (Dset6), (Dset9), (DsetN3), (DsetN5), (DsetN7), (DsetN9), (DsetN11), (DsetN14) the DUT does not support non-persistent datasets.

Note: (Ft4) the DUT does not support getFile simultaneously from two clients.